A Review of the Small Mauretanian Cone Shells with the Description of a New Genus and a New Species

(Gastropoda: Conidae)

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(1 Plate)

The Mauretanian Province exists as a transition zone between the temperate Lusitanian Province to the north and the warmer water Benguelan Province to the south (Ekman, 1954). It encompasses the Canary and Cabo Verde Islands and the west coast of Africa from northern Morocco at the Straits of Gibraltar south to northern Senegal. As in all transitional regions, the Mauretanian Province not only contains a large number of indigenous forms but also species whose ranges overlap from the neighboring provinces.

The 15 species of small Conus s.s. found in the region can be divided into 2 main complexes. The first of these centers around Lautoconus mediterraneus (Hwass, 1792) and represents a northern influence. It is exemplified by such species as L. bruguieri (Kiener, 1848), L. guiensis (Schröter, 1803), L. grayi (Reeve, 1844), L. hybridus (Kiener, 1849), L. olivaceus (Kiener, 1849), the Cabo Verde Islands endemic L. miser (Boivin, 1864), and others. Some of these may be color forms or ecotypes of L. mediterraneus. In all, they represent the largest and most prominent assemblage of cones in this area.

The second group, comprising 5 closely related forms, is particularly noteworthy. Its members are characterized as being unusually diminutive for adult cone shells, averaging only 15 mm. Their shell markings are quite unlike those of any other Atlantic species. Interestingly enough, they exhibit the "textile" pattern thought of as being exclusive to the Indo-Pacific conid genera Cylinder Montfort, 1810, Darioconus Iredale, 1930, Regioconus Iredale, 1930, etc. The following genus is proposed based on these and other morphological characteristics and on their ecology.

GASTROPODA - PROSOBRANCHIA

NEOGASTROPODA

CONIDAE Linnaeus, 1758

Africonus Petuch, gen. nov.

Diagnosis: Shell small; average specimen between 15 and 17 mm in length. Spire noncoronate and flattened. Color pattern generally composed of light-colored triangular or zigzag markings on a dark background. These can be arranged in bands or may cover the entire shell. Protoconch mamillate, but usually eroded on adult specimens. Operculum oval and tiny.

Type Species: Conus cuneolus (Reeve, 1843)

Ecology: The members of the new genus occupy the same niche as the Indo-Pacific Virroconus Iredale, 1930; this being the intertidal zone on a hard substrate. The animals are restricted to depths ranging from 0 to no more than 2 m, and prefer to live among algae on rocks and dead coral in areas of heavy wave action. Such areas as these are typical of the Cabo Verde and Canary Islands, and the Spanish Sahara and Mauretanian coast of West Africa. The effects of this type of high energy environment are evidenced by the eroded spires and numerous healed breaks common to this genus. Their exiguity appears to be a protective adaptation to a rough water situation, allowing them to easily fit into small crevices in the rocks.

